AMENDMENTS TO THE CLAIMS

Docket No.: 5000-0133PUS1

(Currently Amended) A 2-substituted pyrimidine of the formula I

$$R^3$$
 R^2 L_n R^2

in which the index and the substituents are as defined below:

n is an integer from 1 to 5, where at least one substituent L is located in the ortho-position on the phenyl ring;

L is halogen, cyano, nitro; cyanato (OCN), C₁-C₆-alkyl, C₂-C₁₀-alkenyl, C₂-C₁₀-alkynyl, C₁-C₆-alkoxy, C₂-C₁₀-alkenyloxy, C₂-C₁₀-alkynyloxy, C₃-C₆-cycloalkyl, C₃-C₆-cycloalkenyloxy, C₃-C₆-cycloalkoxy, C₃-C₆-cycloalkenyloxy, -C(=S)-N(A')A, -C(=NA')-SA, -C(=O)-A, -C(=O)-A, -C(=O)-N(A')A, C(A')(=N-OA), N(A')A, N(A')-C(=O)-A, N(A'')-C(=O)-N(A')A, S(=O)_m-A. S(=O)_m-O-A or S(=O)_m-N(A')A.

m is 0, 1 or 2;

A, A', A'' independently of one another are hydrogen, C₁-C₆-alkyl, C₂-C₆-alkynyl, C₃-C₈-cycloalkyl, C₃-C₈-cycloalkenyl, phenyl, where the organic radicals may be partially or fully halogenated or may be substituted by cyano or C₁-C₄-alkoxy; or A and A' together with the atoms to which they are attached are a five- or six-membered saturated, partially unsaturated or aromatic heterocycle which contains one to four heteroatoms from the group consisting of O, N and S;

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 R^1 is C_3 - C_{10} -alkyl, C_3 - C_{10} -alkenyl, C_3 - C_{10} -alkynyl, C_3 - C_{12} -cycloalkyl, C_3 - C_{10} -cycloalkenyl or a five- to ten-membered saturated, partially unsaturated or aromatic heterocycle which is attached via carbon and contains one to four heteroatoms from the group consisting of O, N and S,

 R^2 is halogen, cyano, C_1 -C4-alkyn, C_2 -C4-alkynyl, C_2 -C4-alkynyl, C_1 -C4-alkoxy, C_3 -C4-alkenyloxy or C_3 -C4-alkynyloxy, where the alkyl, alkenyl and alkynyl radicals of R^2 may be substituted by halogen, cyano, nitro, C_1 - C_2 -alkoxy or C_1 -C4-alkoxycarbonyl,

where the aliphatic, alicyclic or aromatic groups of the radical definitions of L, \mathbb{R}^1 and/or \mathbb{R}^2 for their part may be partially or fully halogenated or may carry one to four groups \mathbb{R}^n :

 R^u is halogen, cyano, C_1 - C_8 -alkyl, C_2 - C_{10} -alkenyl, C_2 - C_{10} -alkynyl, C_1 - C_6 -alkoxy, C_2 - C_{10} -alkenyloxy, C_2 - C_{10} -alkynyloxy, C_2 - C_{10} -alkynyloxy, C_3 - C_6 -cycloalkyl, C_3 - C_6 -cycloalkenyl, C_3 - C_6 -cycloalkenyloxy, C_3 - C_6 -cycloalkenyloxy, C_9 - C_9

 $R^{3} \text{ is cyano, } CO_{2}R^{a}, C(=O)NR^{2}R^{b}, C(=O)-N-OR^{b}, C(=S)-NR^{2}R^{b}; C(=NOR^{a})NR^{2}R^{b}, \\ C(=NR^{a})NR^{2}R^{b}, C(=O)NR^{a}-NR^{2}R^{b}, C(=N-NR^{2}R^{a})NR^{4}R^{b}, C(=O)R^{a}, C(=NOR^{b})R^{a}, C(=N-NR^{2}R^{b})R^{a}, CR^{a}R^{b}-OR^{2}, CR^{a}R^{b}-NR^{2}R^{a}, ON(=CR^{a}R^{b}), O-C(=O)R^{a}, NR^{a}R^{b}, NR^{a}(C(=O)R^{b}), \\ NR^{a}(C(=O)OR^{b}), NR^{a}(C(=O)-NR^{2}R^{b}), NR^{a}(C(=NR^{c})R^{b}), NR^{a}(N=CR^{c}R^{b}), NR^{a}-NR^{c}R^{b}, NR^{2}-OR^{a}, NR^{a}(C(=NR^{c})-NR^{2}R^{b}), NR^{a}(C(=NCR^{c})R^{b}); where$

R^a,R^b,R^c independently of one another are hydrogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkenyl, C₂-C₆-alkyl, C₃-C₆-cycloalkyl or C₄-C₆-cycloalkenyl;

Rb' has the same meanings as Rb, except for hydrogen;

R2 has the same meanings as R2 and may additionally be -CO-R2;

where the aliphatic or alicyclic groups of the radical definitions of $R^a_{,}R^b_{,}R^c$ or R^z for their part may be partially or fully halogenated or may carry one to four groups R^w :

R^w is halogen, cyano, C₁-C₆-alkyl, C₂-C₁₀-alkenyl, C₂-C₁₀-alkynyl, C₁-C₆-alkoxy, C₂-C₁₀-alkenyloxy, C₂-C₁₀-alkynyloxy, C₃-C₆-cycloalkyl, C₃-C₆-cycloalkenyl, C₃-C₆-cycloalkenyloxy, and where two of the radicals R^a, R^b, R^c or R^z together with the atoms to which they are attached may form a five- or six-membered saturated, partially unsaturated or aromatic heterocycle which contains one to four heteroatoms from the group consisting of O, N and S.

- (Original) A 2-substituted pyrimidine according to claim 1 where R² is chlorine, eyano, methyl, ethyl or methoxy.
- 3. (Currently Amended) A 2-substituted pyrimidine according to claim 1 where R^3 is cyano, $C(=O)NR^zR^b$, $E(=S)NR^zR^b$; $C(=NOR^z)NR^zR^b$, $C(=NOR^b)R^z$, $C(=N-NR^zR^b)R^z$ or $CR^zR^b-NR^zR^c$.
- (Original) A 2-substituted pyrimidine according to claim 1 where R³ is ON(=CR⁸R⁸), NR⁸(C(=O)R⁸), NR⁸(C(=O)OR⁸), NR⁸(N=CR⁸R⁸) or NR²-OR⁸.

5. (Previously Presented) A 2-substituted pyrimidine according to claim 1 in which the phenyl group substituted by L_n is the group B

where # is the point of attachment to the pyrimidine skeleton and

L1 is fluorine, chlorine, CH3 or CF3;

L²,L⁴ independently of one another are hydrogen, CH₃ or fluorine;

 L^3 is hydrogen, fluorine, chlorine, cyano, CH₃, SCH₃, OCH₃, SO₂CH₃, NH-C(=0)CH₃, N(CH₃)-C(=0)CH₃ or COOCH₃ and

L5 is hydrogen, fluorine, chlorine or CH3.

6. (Original) A process for preparing 2-substituted pyrimidines of the formula I according

$$\mathbf{x}$$
 \mathbf{y}
 \mathbf{z}
 \mathbf{z}
 \mathbf{z}

to claim 1 where R³ is cyano, which comprises reacting a compound of the formula III, in which the substituents L, R¹ and R² are as defined in claim 1 and X is halogen, C₁-C₆-alkoxy, C₁-

C6-alkylthio, C1-C6-alkylsulfoxyl, C1-C6-alkylsulfonyl or C1-C6-alkylsulfenyl with a hydrocyannic acid derivative, if appropriate in the presence of a base.

- (Original) A composition suitable for controlling harmful fungi which comprises a solid or liquid carrier and a compound of the formula I according to claim 1.
- 8. (Original) A method for controlling phytopathogenic harmful fungi which comprises treating the fungi or the materials, plants, the soil or seeds to be protected against fungal attack with an effective amount of a compound of the formula I according to claim 1.
- (Previously Presented) A 2-substituted pyrimidine according to claim 2 in which the phenyl group substituted by L_n is the group B

where # is the point of attachment to the pyrimidine skeleton and

L1 is fluorine, chlorine, CH3 or CF3;

L2,L4 independently of one another are hydrogen, CH3 or fluorine;

L³ is hydrogen, fluorine, chlorine, cyano, CH₃, SCH₃, OCH₃, SO₂CH₃, NH-C(=0)CH₃, N(CH₃)-C(=0)CH₃ or COOCH₃ and

L5 is hydrogen, fluorine, chlorine or CH3.

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10. (Previously Presented) A 2-substituted pyrimidine according to claim 3 in which the

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 (Previously Presented) A 2-substituted pyrimidine according to claim 3 in which the phenyl group substituted by L_n is the group B

where # is the point of attachment to the pyrimidine skeleton and

L1 is fluorine, chlorine, CH3 or CF3;

L2,L4 independently of one another are hydrogen, CH3 or fluorine;

L³ is hydrogen, fluorine, chlorine, cyano, CH₃, SCH₃, OCH₃, SO₂CH₃, NH-C(=0)CH₃, N(CH₃)-C(=0)CH₃ or COOCH₃ and

L5 is hydrogen, fluorine, chlorine or CH3.

- 11. (Cancelled)
- 12. (Previously Presented) A 2-substituted pyrimidine according to claim 4 in which the phenyl group substituted by L_n is the group B

where # is the point of attachment to the pyrimidine skeleton and

L1 is fluorine, chlorine, CH3 or CF3;

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L2,L4 independently of one another are hydrogen, CH3 or fluorine;

L³ is hydrogen, fluorine, chlorine, cyano, CH₃, SCH₃, OCH₃, SO₂CH₃, NH-C(=O)CH₃,

N(CH₃)-C(=O)CH₃ or COOCH₃ and

L5 is hydrogen, fluorine, chlorine or CH3.

13. (New) A 2-substituted pyrimidine of the formula I

$$R^3$$
 R^2 L_n

in which the index and the substituents are as defined below:

n is an integer from 1 to 5, where at least one substituent L is located in the ortho-position on the phenyl ring;

L is nitro, -C(=S)-N(A')A, or -C(=NA')-SA,

m is 0, 1 or 2;

A, A', A'' independently of one another are hydrogen, C₁-C₆-alkyl, C₂-C₆-alkynyl, C₃-C₈-cycloalkyl, C₃-C₈-cycloalkenyl, phenyl, where the organic radicals may be partially or fully halogenated or may be substituted by cyano or C₁-C₄-alkoxy; or A and A' together with the atoms to which they are attached are a five- or six-membered saturated, partially unsaturated or aromatic heterocycle which contains one to four heteroatoms from the group consisting of O, N and S;

 R^1 is C_3 - C_{10} -alkyl, C_3 - C_{10} -alkenyl, C_3 - C_{10} -alkynyl, C_3 - C_{12} -cycloalkyl, C_3 - C_{10} -cycloalkenyl or a five- to ten-membered saturated, partially unsaturated or aromatic heterocycle which is attached via carbon and contains one to four heteroatoms from the group consisting of O, N and S,

 R^2 is halogen, cyano, C_1 - C_4 -alkyn, C_2 - C_4 -alkyn, C_2 - C_4 -alkyn, C_1 - C_4 -alkoxy, C_3 - C_4 -alkenyloxy or C_3 - C_4 -alkynyloxy, where the alkyl, alkenyl and alkynyl radicals of R^2 may be substituted by halogen, cyano, nitro, C_1 - C_2 -alkoxy or C_1 - C_4 -alkoxycarbonyl,

where the aliphatic, alicyclic or aromatic groups of the radical definitions of L, R^1 and/or R^2 for their part may be partially or fully halogenated or may carry one to four groups R^u :

R^u is halogen, cyano, C₁-C₈-alkyl, C₂-C₁₀-alkenyl, C₂-C₁₀-alkynyl, C₁-C₆-alkoxy, C₂-C₁₀-alkenyloxy, C₂-C₁₀-alkynyloxy, C₃-C₆-cycloalkyl, C₃-C₆-cycloalkenyl, C₃-C₆-cycloalkoxy, C₃-C₆-cycloalkenyloxy, C₆-Cycloalkenyloxy, C₆-Cycloalkenyloxy, C₇-C₈-Cycloalkenyloxy, C₈-C₉-Cycloalkenyloxy, C₈-C₉-Cycloalkenyloxy, C₈-C₉-Cycloalkenyloxy, C₈-C₉-Cycloalkenyloxy, C₉-C₉-Cycloalkenyloxy, C₈-C₉-Cycloalkenyloxy, C₈-C₉-Cycloalkenyl, C₉-C₉-Cycloalkenyl, C₉-C₉

 $R^{3} \ \ is \ \ cyano, \ \ CO_{2}R^{a}, \ \ C(=O)NR^{2}R^{b}, \ \ C(=O)-N-OR^{b}, \ C(=S)-NR^{a}R^{b}, \ \ C(=NCR^{a})NR^{2}R^{b}, \ C(=NCR^{a})NR^{2}R^{b}, \ C(=NCR^{b})NR^{a}R^{b}, \ C(=NCR^{b})R^{a}, \ C(=NCR^{b})R^{a}, \ C(=NCR^{b})R^{a}, \ C(=NCR^{a}R^{b}-OR^{2}, \ CR^{a}R^{b}-NR^{2}R^{c}, \ ON(=CR^{a}R^{b}), \ O-C(=O)R^{a}, \ NR^{a}R^{b}, \ NR^{a}(C(=O)R^{b}), \ NR^{a}(C(=O)R^{b}), \ NR^{a}(C(=O)R^{a}R^{b}), \ NR^{a}(C(=O)R^{a}R^{b}), \ NR^{a}(N=CR^{a}R^{b}), \ NR^{a}-NR^{2}R^{b}, \ NR^{2}-OR^{a}, \ NR^{a}(C(=NCR^{a}R^{b}), \ NR^{a}(N=CR^{a}R^{b}), \ NR^{a}-NR^{2}R^{b}, \ NR^{a}-NR^{2}R^{a}-NR^{2}R^{a}-NR^{2}R^{a}-NR^{2}R^{a}-NR^{2}R^{a}-NR^{2}R^{a}-NR^{2}R^{a}-NR^$

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 R^a, R^b, R^c independently of one another are hydrogen, C_1 - C_6 -alkyl, C_2 - C_6 -alkenyl, C_2 - C_6 -alkynyl, C_3 - C_6 -cycloalkyl or C_4 - C_6 -cycloalkenyl;

Rb has the same meanings as Rb, except for hydrogen;

Rz has the same meanings as Ra and may additionally be -CO-Ra;

where the aliphatic or alicyclic groups of the radical definitions of R^a, R^b, R^c or R^z for their part may be partially or fully halogenated or may carry one to four groups R^w :

R^w is halogen, cyano, C₁-C₈-alkyl, C₂-C₁₀-alkenyl, C₂-C₁₀-alkynyl, C₁-C₆-alkoxy, C₂-C₁₀-alkenyloxy, C₂-C₁₀-alkynyloxy, C₃-C₆-cycloalkyl, C₃-C₆-cycloalkenyl, C₃-C₆-cycloalkoxy, C₃-C₆-cycloalkenyloxy, and where two of the radicals R⁸, R⁶, R^c or R^z together with the atoms to which they are attached may form a five- or six-membered saturated, partially unsaturated or aromatic heterocycle which contains one to four heteroatoms from the group consisting of O, N and S.

14. (New) A composition suitable for controlling harmful fungi which comprises a solid or liquid carrier and a compound of the formula I according to claim 13.

15. (New) A method for controlling phytopathogenic harmful fungi which comprises treating the fungi or the materials, plants, the soil or seeds to be protected against fungal attack with an effective amount of a compound of the formula I according to claim 13. Application No. 10/549,936 Docket No.: 5000-0133PUS1

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16. (New) A 2-substituted pyrimidine of the formula I

$$\mathbb{R}^{1}$$
 \mathbb{L}_{n} \mathbb{R}^{2}

in which the index and the substituents are as defined below:

n is an integer from 1 to 5, where at least one substituent L is located in the ortho-position on the phenyl ring;

L is halogen, cyano, nitro, cyanato (OCN), C₁-C₈-alkyl, C₂-C₁₀-alkenyl, C₂-C₁₀-alkynyl, C₁-C₆-alkoxy, C₂-C₁₀-alkenyloxy, C₂-C₁₀-alkynyloxy, C₃-C₆-cycloalkyl, C₃-C₆-cycloalkenyloxy, C₃-C₆-cycloalkenyloxy, -C(=S)-N(A')A, -C(=NA')-SA, -C(=O)-A, -C(=O)-A, -C(=O)-N(A')A, C(A')(=N-OA), N(A')A, N(A')-C(=O)-A, N(A'')-C(=O)-N(A')A, S(=O)_m-A, S(=O)_m-O-A or S(=O)_m-N(A')A.

m is 0. 1 or 2:

A, A', A" independently of one another are hydrogen, C₁-C₆-alkyl, C₂-C₆-alkynyl, C₃-C₈-cycloalkyl, C₃-C₈-cycloalkyl, phenyl, where the organic radicals may be partially or fully halogenated or may be substituted by cyano or C₁-C₄-alkoxy; or A and A' together with the atoms to which they are attached are a five- or six-membered saturated, partially unsaturated or aromatic heterocycle which contains one to four heteroatoms from the group consisting of O, N and S;

R¹ is C₃-C₁₀-alkyl, C₃-C₁₀-alkenyl, C₃-C₁₀-alkynyl, C₃-C₁₂-cycloalkyl, C₃-C₁₀-cycloalkenyl or a five- to ten-membered saturated, partially unsaturated or aromatic heterocycle

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which is attached via carbon and contains one to four heteroatoms from the group consisting of O, N and S,

 R^2 is halogen, cyano, C_1 -C₄-alkyn, C_2 -C₄-alkynyl, C_1 -C₄-alkoxy, C_3 -C₄-alkynyloxy or C_3 -C₄-alkynyloxy, where the alkyl, alkenyl and alkynyl radicals of R^2 may be substituted by halogen, cyano, nitro, C_1 - C_2 -alkoxy or C_1 -C₄-alkoxycarbonyl,

where the aliphatic, alicyclic or aromatic groups of the radical definitions of L, \mathbb{R}^1 and/or \mathbb{R}^2 for their part may be partially or fully halogenated or may carry one to four groups \mathbb{R}^n :

 R^u is halogen, cyano, C_1 - C_8 -alkyl, C_2 - C_{10} -alkenyl, C_2 - C_{10} -alkynyl, C_1 - C_6 -alkoxy, C_2 - C_{10} -alkenyloxy, C_2 - C_{10} -alkynyloxy, C_2 - C_{10} -alkynyloxy, C_3 - C_6 -cycloalkyl, C_3 - C_6 -cycloalkenyl, C_3 - C_6 -cycloalkenyloxy, C_3 - C_6 -cycloalkenyloxy, C_9 - C_9

R3 is C(=S)-NRaRb; where

 $R^{a}, R^{b}, R^{c} \ \ independently \ of \ one \ another \ are \ hydrogen, \ C_{1}\text{-}C_{6}\text{-}alkyl, \ C_{2}\text{-}C_{6}\text{-}alkenyl, \ C_{2}\text{-}C_{6}$ alkynyl, $C_{3}\text{-}C_{6}\text{-}cycloalkyl \ or \ C_{4}\text{-}C_{6}\text{-}cycloalkenyl;}$

where the aliphatic or alicyclic groups of the radical definitions of R^a, R^b, R^c or R^z for their part may be partially or fully halogenated or may carry one to four groups R^w :

R^w is halogen, cyano, C₁-C₈-alkyl, C₂-C₁₀-alkenyl, C₂-C₁₀-alkynyl, C₁-C₆-alkoxy, C₂-C₁₀-alkynyl, C₁-C₆-alkynyloxy, C₂-C₆-cycloalkyl, C₃-C₆-cycloalkyl, C₃-C₆-cyc

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 $C_6\text{-cycloalkenyloxy},$ and where two of the radicals $R^a,\,R^b,\,R^c$ or R^z together with the atoms to

which they are attached may form a five- or six-membered saturated, partially unsaturated or

aromatic heterocycle which contains one to four heteroatoms from the group consisting of O. N

and S.

17. (New) A composition suitable for controlling harmful fungi which comprises a solid

or liquid carrier and a compound of the formula I according to claim 16.

18. (New) A method for controlling phytopathogenic harmful fungi which comprises

treating the fungi or the materials, plants, the soil or seeds to be protected against fungal attack

with an effective amount of a compound of the formula I according to claim 16.

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